MCKV Institute of Engineering
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Subject: **Object Oriented Programming Lab**   Code:**PC-CS592**
Stream: CSE   Credit: 1.5

Assignment: - 10/*Concept of Exception Handling*

A. Write a code segment in Try block where divide by zero occurs, also write corresponding catch block to catch the exception that occurs in the try block. Print the origin of the exception caught.

B. Create an array of 10 integers and assign an integer in location 15 of the array. Print the appropriate message in catch block. Considering the same assignment write two catch block one to catch the "Exception" another for exception "ArrayIndexOutofBoundsException". In first catch block re-throw the exception caught. In second catch block print the origin of the exception.

C. Write a java code segments that results a "NullPointerException". Write a necessary catch block to handle the exception. Also write a finally block with appropriate statements in it.

D. Create a superclass Mathexception and two subclasses Overflowexception and UnderflowException. Write a code segment that throws an Overflowexception. Write three catch block one for Mathexception and others are for Overflowexception and UnderflowException. In first catch block re-throw the exception caught in other two catch blocks, write appropriate message to handle it and show the results. Instantiate an integer variable and initialize with some value. If the value is greater than 100 an OverFlowException is thrown otherwise an UnderFlowException is thrown, handle the exception with appropriate message.

Assignment: - 11/*Concept of Thread*

A. Create two threads. One will print from 1 to 10. Another will print 10 to 1. In the second thread if value is 6 it will sleep for 10000 milliseconds.

B. Create a class with 2 instance variables say integer a & integer b. Create a method add that will copy value of instance variables into some local variables c & d. Then the method will sleep for 0.5 seconds, add their values (a & b) and print it. Create another method increase that will increase the value of a & b by 5 each, wait for 0.5 seconds and print their values. Create two different threads to perform these 2 tasks, invoke the add thread first.

Assignment: - 12/*Concept of Package*

A. Create your own package having an interface called addmul with two methods add( ) and show ( ). Create three different implementations of that interface to add either 2 integers, or 2 double or 2 strings. Create your own method outside the package.

Assignment: - 13/*Concept of Applet*
A. Create an applet to draw a smiling face.
B. Create another applet to draw a house whose door will open and close at 1 second interval.

Home Assignment

C. Create an applet to draw a rectangle that can be resized by mouse dragging. Create an applet that will take two double values through text boxes and perform mathematical operation according to the button pressed.
D. Create an applet that will print your name, the font should be resized by pressing enlarge or contract button.
E. Create an applet to edit a text file.

F. Create an applet with buttons home, cup, Indian flag. It should draw a picture in a different frame whenever you press a button.

1.

2.

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Signatures of the Faculty Members   Signatures of HOD (CSE)